IN THE SPECIFICATION:

The paragraph beginning at line 19 of page 3 has been amended as follows:

On the other hand, in the dispersed-dot dithering, the threshold matrix is designed such that a dot arrangement of an output pattern is spatially dispersed. As a representative of the dispersed-dot dithering, a Bayer-type systematic dithering method ("An ~~Optical~~ Optimum Method For Two-Level Rendition Of Continuous-Tone Pictures" Bayer, Proc. IEEE Int. Conf. Commun., Conference Record, p.26-11, 1973) is known so far. In the Bayer-type systematic dithering method, since a threshold arrangement is extremely regular, when an input image having a uniform gray level is subjected to a halftone process, an output pattern which is extremely regular for the input images of all gray levels is created, whereby uniformity of the dot pattern is satisfactory. However, when an output device of which the definition is relatively low is used, there is a problem that a rough texture (dither pattern) is perceived at a period of the size (16 × 16 in case of 256 gray levels) of a threshold matrix. Further, when a periodic pattern is included in the input image, there is a problem that moire may occur in the output image. For this reason, in the output device of which the definition is relatively low, i.e., several hundreds of dots per inch (dpi), image quality is deteriorated as compared with the error diffusion method, whereby the Bayer-type systematic dithering method is not used for the purpose to obtain a high-quality halftone image.

The paragraph beginning at line 15 of page 19 has been amended as follows:

In the embodiments, it is assumed that the 256 × 256 square mask for 256 gray levels is used, and if the input image is larger than the mask size, the masks ~~tegularly~~ regularly and repeatedly arranged longitudinally and laterally are used.

The paragraph beginning at line 4 of page 26 has been amended as follows:

Next, the potential is assigned to each dot at a corresponding location in each of the 64 ~~dots~~ blocks, and the sum of the potentials is recalculated (step S3-2).

The paragraph beginning at line 15 of page 31 has been amended as follows:

On the other hand, randomness is assigned to the ~~192~~ 256 dots which are assigned in the blocks other than the blocks where the dot patterns are mutually the same. In the present embodiment, the dot is selected at random from one of the four corners of the block of the 7 × 7 pixels as shown by the thick line in Fig. 9, at a probability of 1/4.